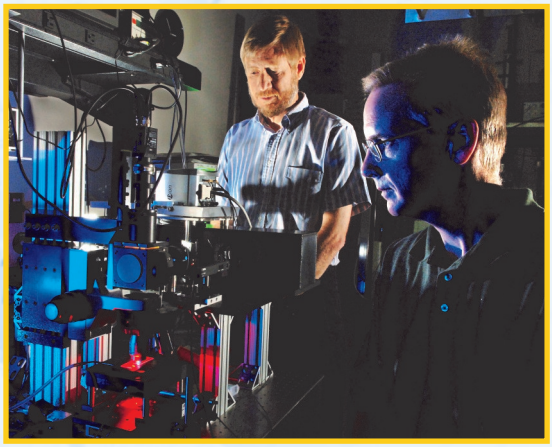
Sandia National Laboratories

Advanced Forms of Activated Carbon

Summary

Sandia's advanced activated carbon is used for the adsorption of noble gases (argon, krypton, and xenon) for the reprocessing of spent nuclear fuel. This solution is simple, reliable, and affordable. This development is also safer due to the fire hazards associated with traditional activated carbon are significantly reduced.



Activated carbon adsorbers have numerous industrial applications including chemical and petrochemical, environmental engineering, nuclear, military, and specialist extraction. In these industries, the activated carbon is used to control emissions of solvents and other volatile organic compounds (VOCs) and other chemicals...now with the reduced risk of spontaneous ignition and fire hazards.

Licensing & Partnering Status:

Various licensing and partnering options are available. Please contact the Intellectual Property Department to discuss.

Technology Readiness Level:

Sandia estimates this technology at a TRL 4. The key elements of the technology have been proven to work as expected in the laboratory environment.

BENEFITS

- Significant reduction in risk of fire hazards associated with traditional activated carbon
- Adsorption of noble gases
- Reduces risk associated with nuclear fuel reprocessing
- Numerous applications in other industries that also reduce risk and environmental impact

APPLICATIONS

- Mining
- Nuclear power & fuel processing
- Waste management
- Water purification
- Environmental cleanup
- Medical
- Chemical industry

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U.S. PATENTS PENDING

INTELLECTUAL PROPERTY & LICENSING CONTACT

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National Nuclear Security Administration

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